

A Comprehensive Water Conservation Program for South Florida

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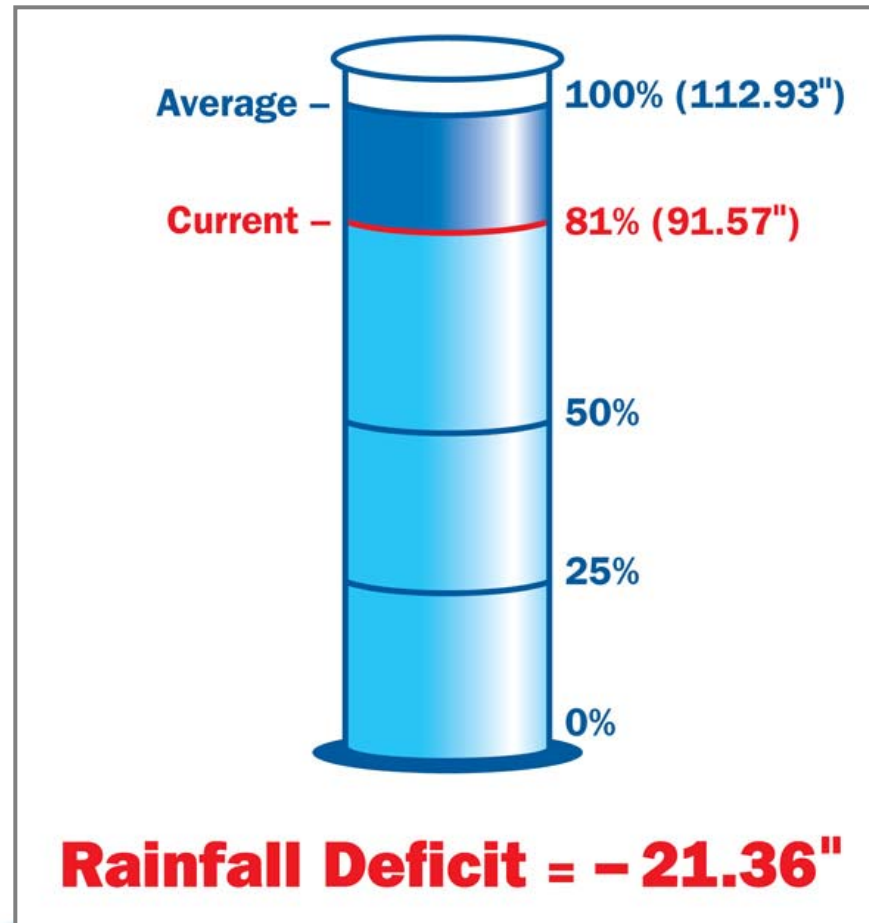
Governing Board Workshop
April 9, 2008

April –Water Conservation Month



Multi-Year Rainfall Deficit

November 2005 through February 2008



Comprehensive Water Conservation Program

Goals

- Create a year-round culture of conservation
- Eliminate wasteful water use
- Promote efficient water use
- Establish partnerships to maximize effectiveness

WATER CONSERVATION SUMMIT



Water Conservation Stakeholder Group



Representative water users:

- Local Governments
- Environment
- Agriculture
- Nurseries/Landscapers
- Utilities
- Developers
- Property Owners/HOAs
- Parks and Recreation
- Sports and Leisure
- Tourism
- Small Businesses
- Manufacturing
- Hospitality/Service Industries

Calendar

- ✓ December 4, 2007: Water Conservation Summit
- ✓ **December 17, 2007: Stakeholder Meeting #1**
- ✓ **January 28, 2008: Stakeholder Meeting #2**
- ✓ February 7, 2008: Update to WRAC
- ✓ **February 28, 2008: Stakeholder Meeting #3**
- ✓ February 29, 2008: Ten-County Coalition Presentation
- ✓ March 6, 2008: Update to WRAC
- ✓ **March 28, 2008: Stakeholder Meeting #4**
- ✓ April 3, 2008: Update to WRAC
- ✓ April 9, 2008: Present Draft Water Conservation Program to Governing Board
- **May: Final Stakeholder Meeting**
- June: Present Final Plan to WRAC & Governing Board

Program Components



- Regulatory Initiatives
- Voluntary & Incentive-based Initiatives
- Education & Marketing Initiatives

Program Implementation

- Strategies and Action Steps for each Program Component
- Cost Effectiveness / Ease of Implementation / Water Savings for each Strategy
- Ten-year Implementation Schedule – Immediate, Short, Mid and Long-Term Action Steps

Water Conservation Program

Vision

Create and implement a comprehensive and enduring water conservation program for South Florida. This successful program achieves a measurable reduction in water use, inspires governments, citizens and businesses to value and embrace a conservation ethic and serves as a national model for water conservation.

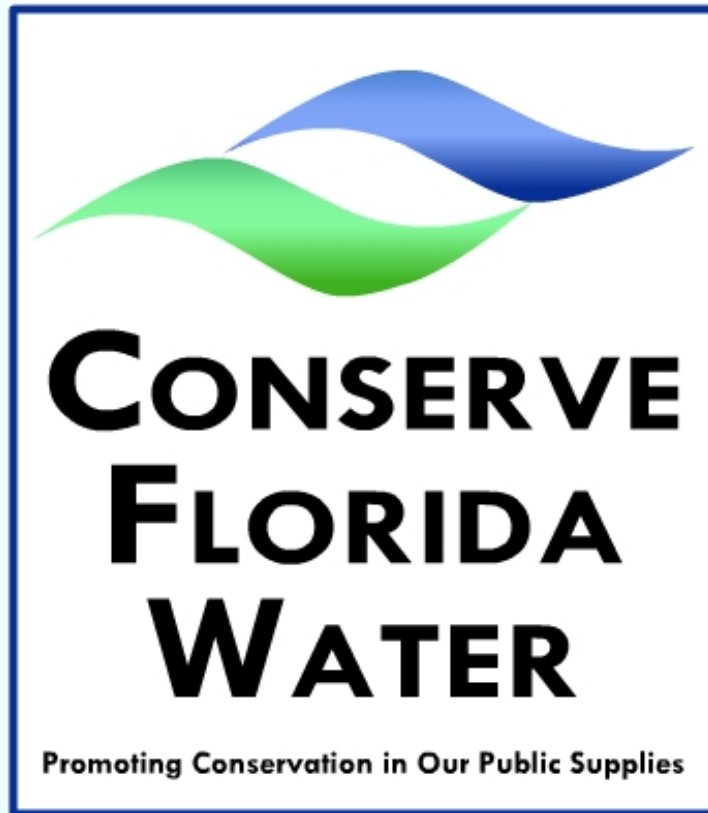
Regulatory Initiatives

Water Conservation Program – Regulatory Initiatives

Goal

In partnership with utilities and local governments, adopt and implement goal-based water conservation regulations, local ordinances and utility practices to promote water efficiencies, further advance water management and achieve measurable reductions in public and private water use.

Regulatory Initiatives Strategies: Public Water Supply



- Utility-specific goal-based conservation plans
- Effective water conservation rates
- Retrofit and leak-detection programs

Regulatory Initiatives Strategies: Agricultural Irrigation



- Crop-specific irrigation systems

Regulatory Initiatives Strategies: Landscape Irrigation

Florida-Friendly Landscaping

THE SMART WAY TO GROW




- Consistency in local governments' landscape code ordinances
- Year-round landscape irrigation measures



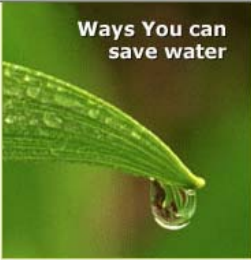
NATURESCAPE

Regulatory Initiatives Strategies: Industrial, Commercial & Institutional Uses


- Improved compliance through web-based self reporting



**New Restrictions
January 15**



**Ways You can
save water**



**Telephone
Contacts**

**Report Violations in
YOUR Community:**
County and City
Enforcement Contacts [PDF]

**SFWMD Water Shortage
Hotline (800) 662-8876**

» **Effective January 15, 2008**

Although recent rains are helping some communities, water levels in Lake Okeechobee and many other lakes, rivers, wetlands and aquifers in the 16 county region continue to be below normal. Most weather forecasts for the coming months predict continuing rainfall deficits. That's why **mandatory water restrictions** remain in effect. For most communities, **one-day-per-week restrictions** now apply, and year-round conservation requirements are being considered.

» **NEWS: Water Shortage Lingers Despite February Rains** - Above-average February showers fall well short of making up for two years of deficit rainfall. (March 12)

» **QUESTIONS & ANSWERS: One-Day-Per-Week Water**

» **JUST the FACTS - Extreme Water Shortage Declared**

Current Water Restrictions

Frequ

permit_number

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Next


WI


[Comment on year-round conservation ideas](#)

Agricultural Restrictions

» [Lake Okeechobee Service Area \(LOSA\)](#)

» [Indian Prairie & Lake Istokpoga](#)





Golf Course, Utilities and Lower East Regional System Users (Agriculture, Diversion & Impoundment) PERMITTEES - ENTER Water Shortage Data HERE

Hallandale Bch

DATE:

Elevation (NGVD or mean sea level):

Conductance (umhos/cm):

Elevation (NGVD or mean sea level):

Conductance (umhos/cm):

mped: Comments:

2 Gallons of Water Pumped: Comments:

3 Gallons of Water Pumped: Comments:

4 Gallons of Water Pumped: Comments:

5 Gallons of Water Pumped: Comments:

6 Gallons of Water Pumped: Comments:

7 Gallons of Water Pumped: Comments:

8 Gallons of Water Pumped: Comments:

Regulatory Initiatives Strategies: Golf Courses



- Florida Friendly landscape design
- Irrigation technologies-
rain and soil moisture
sensors/weather
station systems
- Improved web-based
compliance reporting

Voluntary & Incentive-Based Initiatives

Water Conservation Program – Voluntary & Incentive-Based Initiatives

Goal

Expand voluntary government and industry partnerships and strengthen economic incentives to encourage public and private investments in water conservation. Create and make available to water using sectors incentive programs for water conservation projects and programs.

Voluntary & Incentive-Based Initiatives Strategies: Leading by Example

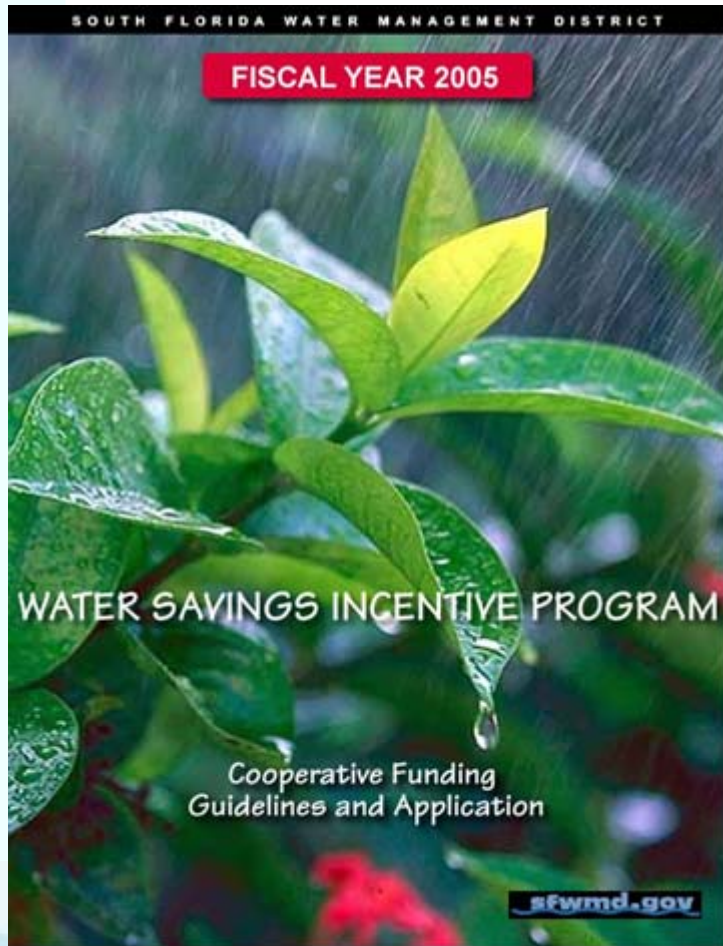


- Reduce water use at District and public facilities
- Support existing and identify new recognition programs



Stewardship starts at home.

Voluntary & Incentive-Based Initiatives Strategies: Financial Incentives



- Identify public/private partnership opportunities
- Continued support for:
 - Water Savings Incentive Program
 - Alternative Water Supply
 - Mobile Irrigation Labs

Voluntary & Incentive-Based Initiatives Strategies: Alternative Water Sources



- Encourage the diversification of supply sources
- Assist with implementation and expansion of reclaimed water systems

Voluntary & Incentive-Based Initiatives Strategies: Public Water Supply



- Identify regional conservation opportunities
- Improve coordination and implementation of water conservation plans
- Encourage use of effective technologies:
 - Automatic line flushing devices
 - Automated meter reading devices

Voluntary & Incentive-Based Initiatives Strategies: Agriculture Irrigation



- Enhance availability of mobile irrigation labs
- Promote water efficient irrigation technologies
- Improve methods for measuring water use and estimating demands

Voluntary & Incentive-Based Initiatives Strategies: Landscape Irrigation



- Maximize use of urban mobile irrigation labs
- Explore alternative practices for landscape irrigation



Voluntary & Incentive-Based Initiatives Strategies: Industrial, Commercial & Institutional Uses



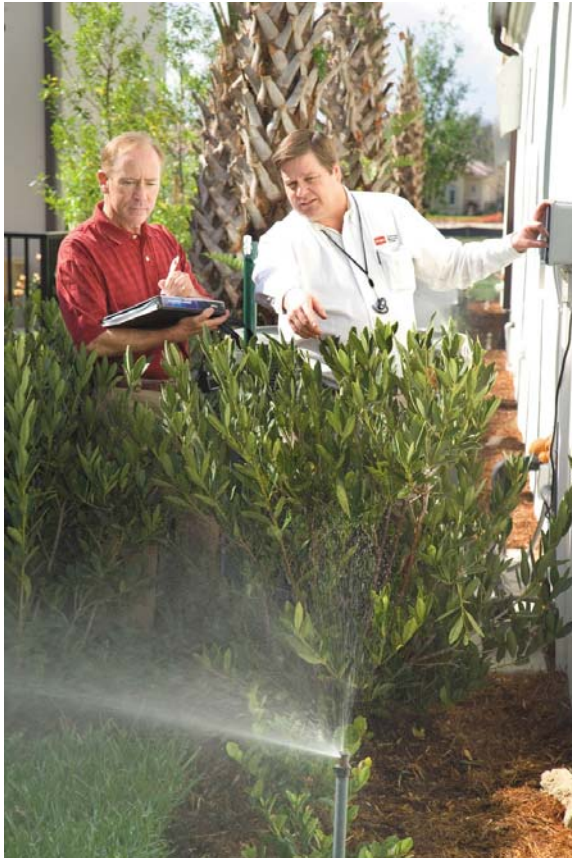
- Implement water auditing program
- Reduce water use for air-conditioning and cooling systems

Voluntary & Incentive-Based Initiatives Strategies: Golf Courses



- Encourage water efficient ground covers
- Promote Florida Friendly landscape design

Voluntary & Incentive-Based Initiatives Strategies: New Development



- Encourage installation of high efficiency water saving devices
- Promote Leadership in Environmental Energy and Design (LEED) certification



Voluntary & Incentive-Based Initiatives Strategies: Hospitality



- Assist implementation of water auditing program
- Encourage high efficiency water saving devices

Education & Marketing Initiatives

Water Conservation Program – Education & Marketing Initiatives

Goal

- *Collaborate and coordinate with regional partners to educate and inform residents and visitors about their environmental, economic and social responsibility, foster a culture of conservation and position the State of Florida as leader in water conservation.*

Education & Marketing Initiatives Strategies: School-based Education



- Build on existing initiatives
- Workshops for educators
- Share classroom resources

Education & Marketing Initiatives Strategies: Public Information

A Guide to Florida-Friendly Landscaping



*Florida Yards &
Neighborhoods Handbook*

- Build on existing initiatives
- Expand partnerships
- Maximize distribution of public information

Education & Marketing Initiatives Strategies: Public Information



- Continue development of website -

www.savewaterfl.com

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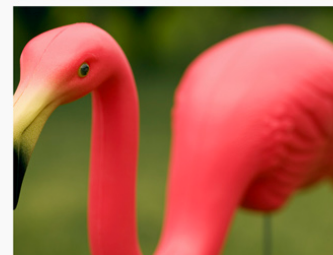
SFWMD awards
\$400,000 to save water

**Tell Us What
You Think ►**

Comment on year-round
irrigation limits.

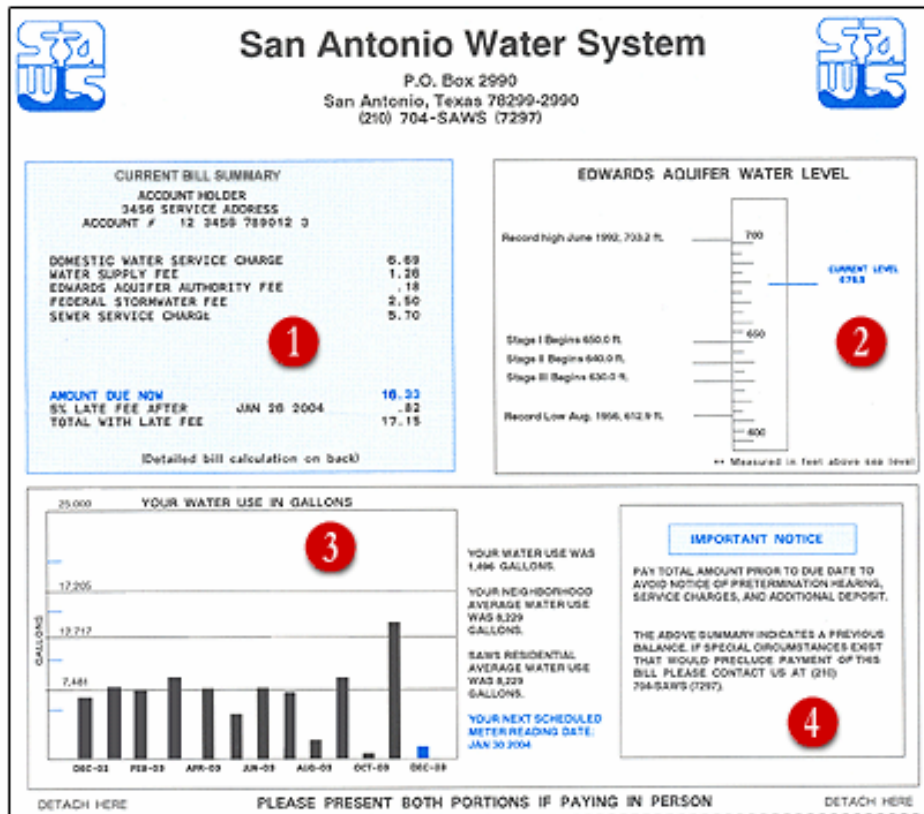
Conservation Tip for August

If you have an automatic sprinkler system, consider installing a rainfall or soil moisture sensor. Rainfall sensors prevent your system from watering in the rain, while soil moisture sensors allow watering only when the soil beneath the surface really needs it.

**Current Restrictions****YardSmart Landscaping****More Water-Saving Tips**

Education & Marketing Initiatives Strategies: Public Information

- Encourage informative billing





San Antonio Water System

P.O. Box 2990
San Antonio, Texas 78299-2990
(210) 704-SAWS (7297)



Yearly consumption history,
neighborhood average,
system-wide average

FEDERAL STORMWATER FEE
SEWER SERVICE CHARGE

2.50
5.70

AMOUNT DUE NOW
5% LATE FEE AFTER
TOTAL WITH LATE FEE

JAN 30 2004

10.33
.52
17.15

Detailed bill calculation on page 2

EDWARDS AQUIFER WATER LEVEL

Record high June 1992, 703.2 ft.

700

CURRENT LEVEL
678.3

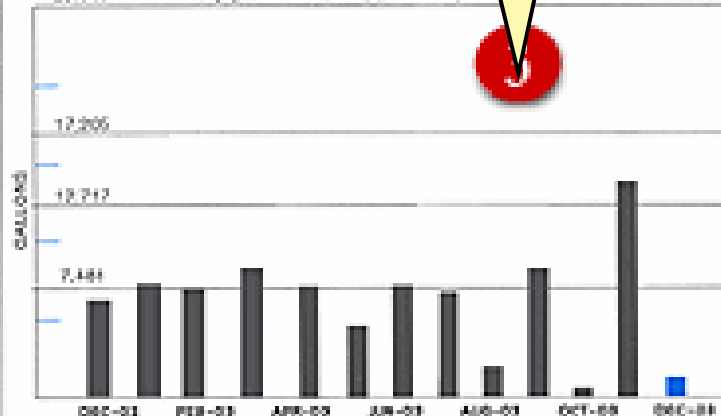
Stage I Begins 650.0 ft.
Stage II Begins 640.0 ft.
Stage III Begins 630.0 ft.

Record Low Aug. 1994, 602.9 ft.

Measured

2

YOUR WATER USE IN GALLONS



YOUR WATER USE WAS
1,494 GALLONS.

YOUR NEIGHBORHOOD

IMPORT

PAY TOTAL AMOUNT
AVOID NOTICE

DATE TO
IN REARNS,

Current aquifer levels, record
high/low level comparison,
water shortage stage

JAN 30 2004

DETACH HERE

PLEASE PRESENT BOTH PORTIONS IF PAYING IN PERSON

DETACH HERE

Education & Marketing Initiatives Strategies: Professional Development



- Offer conservation best practices training and certifications
 - Turf and landscape industries
 - Plumbing professionals
 - General contractors
 - Educators



Education & Marketing Initiatives Strategies: Social Marketing



- Utilize commercial marketing principals
- Provide tools to change behavior



Education & Marketing Initiatives Strategies: Volunteer Activities



- Recruit water conservation ambassadors
- Conduct water academies

Next Steps

- Continue to Prioritize Actions
- Refine Implementation Plan
- Define Success

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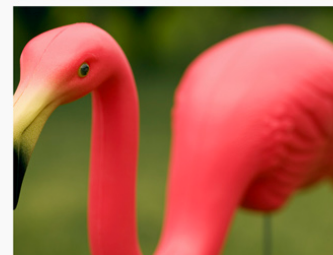
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